

S/N: 09/672,146

3/18/2002

DOCKET NO.: IWA-126-USA-P

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Chikao Nishino et al.

Serial No.: 09/672,146

Reissue Application of  
US Patent No. 5,814,634  
issued on September 29, 1998

Art Unit: 1503

Filed: April 17, 1997

Examiner: Covington, R.

For: Alkylenediamine Derivative, Anti-Ulcer Drug, and  
Antibacterial Drug

RECEIVED  
APR 19 2002  
TECH CENTER 1600/2900  
#

**SUPPLEMENTAL REISSUE APPLICATION DECLARATION  
AND POWER OF ATTORNEY BY INVENTORS  
UNDER 37 CFR § 1.175(b)(1)**

Assistant Commissioner of Patents  
and Trademarks  
Washington, DC 20231

Sir:

We, the named applicants of the above referenced U.S. Patent,  
hereby declare that:

1. Our residences, post office addresses, and citizenships  
are as stated below next to our names.

2. We are the original and first and joint inventors of the  
subject matter which is described and claimed in U.S. Patent No.  
5,814,634 (hereafter "the '634 patent") granted September 29, 1998,  
and described and claimed in the above-identified reissue  
application.

3. We have reviewed and understand the contents of the  
specification and claims of the '634 patent and the specification  
and claims of the above-identified reissue application and as  
amended to date.

4. We believe the '634 patent to be wholly or partly inoperative or invalid by reason of the patentees claiming less than the patentees had the right to claim in said patent and because of an error in said patent, which error is described in paragraphs 6 through 9 of this Declaration.

5. The errors described in paragraphs 6 through 9 hereof, and all errors being corrected in this reissue application up to the time of filing of this Declaration arose without any deceptive intention on the part of the applicants.

6. During the prosecution of the corresponding European application (Application No. 97 302 666.9; filing date: April 18, 1998) in the European Patent Office (hereafter "the EPO") it was realized that the compounds of claim 1, as originally written, had been inadvertently limited to alkylenediamine derivatives or salts thereof of a general formula 1 in which "each of  $R_3$  and  $R_3'$  represents methyl group, prenyl group, or geranyl group and when one of  $R_3$  and  $R_3'$  is prenyl group or geranyl group, another is methyl group" and that the disclosure of the inventors in the patent was much broader than the scope of the issued claim 1. It was further realized during the prosecution in the EPO, that the compounds of claim 5, as originally written, had been inadvertently limited to alkylenediamine derivatives or salts thereof of a general formula 4 in which " $R_4$  and/or  $R_2$  is an alkenyloxy group expressed by the...formula 5... wherein each of  $R_4$  and  $R_4'$  represents methyl group, prenyl group, or geranyl group and when one of  $R_4$  and  $R_4'$  is prenyl group or geranyl group, another is

methyl group" and that the disclosure of the inventors in the patent was much broader than the scope of the issued claim 5.

7. The error which we seek to cure by reissue is the unintentional omission of one supplementary  $\text{CH}_2$  group from (a) the substituents  $\text{R}_3$  and  $\text{R}_3'$  of claim 1 and (b) the substituents  $\text{R}_6$  and  $\text{R}_6'$  of claim 5.

8. Amended claim 1 now requires in pertinent part that "each of  $\text{R}_3$  and  $\text{R}_3'$  represents methyl group, prenyl- $\text{CH}_2$  group, or geranyl- $\text{CH}_2$  group and when one of  $\text{R}_3$  and  $\text{R}_3'$  is prenyl- $\text{CH}_2$  group or geranyl- $\text{CH}_2$  group, another is methyl group," in lieu of the former erroneous proviso reciting that "each of  $\text{R}_3$  and  $\text{R}_3'$  represents methyl group, prenyl group, or geranyl group and when one of  $\text{R}_3$  and  $\text{R}_3'$  is prenyl group or geranyl group, another is methyl group." Without the proposed amendment, claim 1 provides no coverage for the compounds in which:

- (a)  $\text{R}_1$  and  $\text{R}_2$  are not alkenyloxy groups,  $\text{R}_3$  is  $\text{CH}_3$ - and  $\text{R}_3'$  is prenyl- $\text{CH}_2$ - group when only one neryloxy group is on a benzene ring;
- (b)  $\text{R}_1$  and  $\text{R}_2$  are not alkenyloxy groups,  $\text{R}_3$  is prenyl- $\text{CH}_2$  group and  $\text{R}_3'$  is methyl group when only one geranyloxy group is on a benzene ring;
- (c)  $\text{R}_1$  and  $\text{R}_2$  are not alkenyloxy groups,  $\text{R}_3$  is geranyl- $\text{CH}_2$ - group and  $\text{R}_3'$  is methyl group when only one farnesyloxy group is on a benzene ring; and
- (d) one of  $\text{R}_1$  and  $\text{R}_2$  is geranyloxy,  $\text{R}_3$  is prenyl- $\text{CH}_2$ - group and  $\text{R}_3'$  is methyl group when two geranyloxy groups are on a benzene ring.

Such compounds are illustrated in Examples 2-14, 20-26, 29-34, 36-38 and 41-61 of the '634 patent. Thus, this difference is an error related to subject matter which was not previously claimed and, hence, the issued claim 1 does not claim all that we are entitled to claim in the '634 patent. No new matter is added by this amendment of claim 1.

9. Similarly, amended claim 5 now reads in pertinent part that "wherein each of  $R_b$  and  $R_b'$  represents methyl group, prenyl- $CH_2$  group, or geranyl- $CH_2$  group and when one of  $R_b$  and  $R_b'$  is prenyl- $CH_2$  group or geranyl- $CH_2$  group, another is methyl group" in lieu of the previous mistaken proviso stating that "wherein each of  $R_b$  and  $R_b'$  represents methyl group, prenyl group, or geranyl group and when one of  $R_b$  and  $R_b'$  is prenyl group or geranyl group, another is methyl group." Without the proposed amendment --because according to the original claim 5  $R_b$  and  $R_b'$  can be neither prenyl- $CH_2$ - group nor geranyl- $CH_2$ - group--claim 5 provides no coverage for the compounds in which each of  $R_1$  and  $R_2$  is alkenyloxy group such as prenyloxy, geranyloxy, neryloxy or farnesyloxy. Such compounds are depicted in Examples 11-14 and 36-38 of the '634 patent. Thus, this difference is an error related to subject matter which was not previously claimed and, hence, the issued claim 5 does not claim all that we are entitled to claim in the '634 patent. No new matter is added by this amendment of claim 5.

10. Support for amended claim 1 that we seek to present in this reissue application can be found in column 17, line 8 through column 21, line 12 (Examples 2-14), column 22, line 31 through column 23, line 33 (Examples 20-26), column 24, line 44 through

column 25, line 38 (Examples 29-34), column 27, line 1 through column 23, line 29 (Examples 36-38) and column 29, line 1 through column 23, line 23 (Examples 41-61) of the '634 patent. Similarly, support for amended claim 5 can be found in column 20, line 34 through column 21, line 12 (Examples 11-14) and column 27-28, line(s) 1 through column 27-28, line(s) 43 (Examples 36-38) thereof. Thus, claims 1 and 5 as proposed to be amended by this reissue recite alkylenediamine derivatives or salts thereof clearly and adequately described in the '634 patent.

11. It was also realized during said prosecution before the EPO, that, in order to obtain broader patent protection, a reissue application needed to be filed no later than September 29, 2000.

12. We acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. 1.56(a) and which occurred between the filing date of said prior application and the filing date of the application which issued as the '634 patent.

13. We hereby claim foreign priority benefits under Section 119 of Title 35, United States Code, of any foreign patent application for patent or inventor's certificate listed below and have also identified any foreign application for patent or inventor's certificate having a filing date before that of the application of which priority is claimed:

- (a) Japanese Patent Application No. 8-122195 filed on Apr. 18, 1996;
- (b) Japanese Patent Application No. 8-278871 filed on Sep. 30, 1996; and

(c) Japanese Patent Application No. 9-12056 filed on Jan. 6, 1997.

Such priority benefits were claimed in USP 5,814,634, now sought to be reissued. Moreover, the disclosures of the above-identified priority documents were and continue to be incorporated herein by reference.

14. We hereby appoint Ronald R. Snider, Reg. No. 24,962, Elizabeth J. Pawlak, Reg. No. 34,520, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith. Please direct all telephone calls to: Ronald R. Snider, Esq., at telephone number (202) 347-2600, and all correspondence to:

Snider & Associates  
P.O. Box 27613  
Washington, D.C. 20038-7613

15. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of inventor: Chikao NISHINO

Inventor's signature: \_\_\_\_\_

Date: April 16, 2002

Citizenship: Japanese

Residence: Yokohama-shi, KANAGAWA, JAPAN

Post Office Address: c/o SHISEIDO RESEARCH CENTER (2)

2-12-1 Fukuura, Kanazawa-ku, Yokohama-shi, KANAGAWA 236, JAPAN

Full name of inventor: Fumitaka SATO

Inventor's signature: Fumitaka Sato

Date: 4/4/2002

Citizenship: Japanese

Residence: Yokohama-shi, KANAGAWA, JAPAN

Post Office Address: c/o SHISEIDO RESEARCH CENTER (1)

1050 Nippa-cho, Kohoku-ku, Yokohama-shi, KANAGAWA 223, JAPAN

Full name of inventor: Tomohiro UETAKE

Inventor's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Citizenship: Japanese

Residence: Chiyoda-ku, TOKYO, JAPAN

Post Office Address: 10-2 Sotokanda 4-chome, Chiyoda-ku, TOKYO 101,  
JAPAN

Full name of inventor: Hirotada FUKUNISHI

Inventor's signature: Hirotada Fukunishi

Date: 4/4/2002

S/N: 09/672,146

3/18/2002

DOCKET NO.: IWA-126-USA-P

Citizenship: Japanese

Residence: Yokohama-shi, KANAGAWA, JAPAN

Post Office Address: c/o SHISEIDO RESEARCH CENTER (1)

1050 Nippa-cho, Kohoku-ku, Yokohama-shi, KANAGAWA 223, JAPAN

Full name of inventor: Nao KOJIMA

Inventor's signature: Nao Kojima

Date: 4/4/2002

Citizenship: Japanese

Residence: Chuo-ku, TOKYO, JAPAN

Post Office Address: c/o SHISEIDO CO., LTD.

5-5 Ginza 7-chome, Chuo-ku, TOKYO 104-10, JAPAN



1612

S/N: 09/672,146

4/17/2002

DOCKET NO.: IWA-175-USA-P

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Chikao Nishino et al.

Serial No.: 09/672,146

Reissue Application of

US Patent No. 5,814,634

issued on September 29, 1998

Art Unit 1282

RECEIVED  
APR 19 2002  
TECH CENTER 1600/2900

RECEIVED

Filed: April 17, 1997

Examiner: Covington, R.

For: Alkylenediamine Derivative, Anti-Ulcer Drug, and  
Antibacterial Drug



TRANSMITTAL

Assistant Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231  
Box: Non-Fee Amendments

Sir: TRANSMITTED HEREWITH IS

☒ A RESPONSE, ☐ AN AMENDMENT, ☐ AN AMENDMENT AFTER FINAL,

IN THE ABOVE-IDENTIFIED APPLICATION.

☐ Small entity status of this application under 37 CFR §1.9(f) is established  
by a verified statement under 37 CFR §1.27 ☐ previously submitted.  
☐ submitted herewith.

☒ No additional fee is required, as shown below.

CLAIMS PENDING AFTER AMENDMENT		CLAIMS PREVIOUSLY PAID		NEW CLAIMS EXTRA		ADDITIONAL FEES			
						SMALL ENTITY		OTHER THAN SMALL ENTITY	
TOTAL	26	MINUS	26	=	0	x\$9=	0.00	x\$18=	0.00
INDEP	2	MINUS	3	=	0	x\$42=	0.00	x\$84=	0.00
NEW MULTIPLE DEPENDENT CLAIMS					0	x\$140=	0.00	x\$280=	0.00
AND CLAIMS DEPENDENT THEREON					0	x\$140=	0.00	x\$280=	0.00
TOTAL ADDITIONAL FEE						0.00		0.00	

S/N: 09/672,146


4/17/2002

DOCKET NO.: IWA-126-USA-P

☒

This amount is believed to be correct, however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 19-2816. This authorization applies to both filing fees under 37 CFR §1.16 and processing fees (such as extension of time) under 37 CFR §1.17. A duplicate copy of this transmittal is attached.

Respectfully Submitted,

  
Ronald R. Snider  
Registration No. 24,962

Date: April 17, 2002

Snider & Associates  
Ronald R. Snider  
P.O. Box 27613  
Washington, D.C. 20038-7613  
(202) 347-2600

RRS/bam